

D.T.E. 03-48

Petition of Boston Edison Company, Cambridge Electric Light Company, and Commonwealth Electric Company, d/b/a NSTAR Electric Company, pursuant to G.L. c. 25, § 19 and G.L. c. 25A, § 11G, for approval by the Department of Telecommunications and Energy of an Energy Efficiency Plan for 2003.

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 21 Custom House Street
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 FOR: NSTAR ELECTRIC COMPANY
 Petitioner

I. INTRODUCTION

On April 30, 2003, Boston Edison Company, Cambridge Electric Light Company and Commonwealth Electric Company, d/b/a NSTAR Electric Company (“NSTAR” or “Company”) filed with the Department of Telecommunications and Energy (“Department”) its Energy Efficiency Plan for 2003 (“2003 Plan”).¹ The filing was made pursuant to G.L. c. 25, § 19, G.L. c. 25A, § 11G, and Order Promulgating Final Guidelines to Evaluate and Approve Energy Efficiency Programs, D.T.E. 98-100 (2000) (“DTE Guidelines”). The Department docketed this filing as D.T.E. 03-48.

On June 20, 2003, pursuant to G.L. c. 25A, § 11G, 225 C.M.R. §§ 11.00 et seq., and the DTE Guidelines at § 6.2, the Commonwealth of Massachusetts, Division of Energy Resources (“DOER”), filed a report on the 2003 Plan with the Department (“DOER Report”). The DOER Report found that the 2003 Plan is consistent with the statewide energy efficiency goals required by G.L. c. 25A, § 11G, and with DOER’s Guidelines for energy efficiency programs (DOER Report at 2). See Guidelines Supporting the Massachusetts Division of Energy Resources Energy Efficiency Oversight and Coordination Regulation, 225 C.M.R. §§ 11.00 et seq.

¹ NSTAR stated that it developed the 2003 Plan with an energy efficiency collaborative composed of: (1) the Low-Income Energy Affordability Network; (2) the Energy Consortium; (3) Associated Industries of Massachusetts; and (4) the Massachusetts Climate Action Network (April 30, 2003 NSTAR letter to the Department).

On July 8, 2003, the Department issued a notice of filing and request for comments. No comments were submitted. NSTAR responded to sixteen Department information requests.²

II. STANDARD OF REVIEW

The Department is required to ensure that energy efficiency activities are delivered in a cost-effective manner utilizing competitive procurement processes to the fullest extent practicable. G.L. c. 25, § 19; G.L. c. 25A, § 11G. The Department has established guidelines that, among other things, set forth the manner in which the Department reviews ratepayer-funded energy efficiency plans in coordination with DOER, pursuant to G.L. c. 25, § 19 and G.L. c. 25A, § 11G. See D.T.E. 98-100.

DOER has the authority to oversee and coordinate ratepayer-funded energy efficiency programs, consistent with specified goals, and is required to file annual reports with the Department regarding proposed funding levels for said programs. G.L. c. 25A, § 11G; 225 C.M.R. §§ 11.00 et seq. If the DOER report concludes that ratepayer-funded energy efficiency programs are consistent with state energy efficiency goals, and if no objection to the DOER report is raised, the Department's review of the 2003 Plan is limited to cost-effectiveness issues and the use of competitive processes. DTE Guidelines at § 6.2; 225 C.M.R. §§ 11.00 et seq.

² On its own motion, the Department moves into the record of this proceeding, the 2003 Plan, and the Company's responses to sixteen Department information requests. The responses are marked as Exhs. DTE 1-1 through DTE 1-12, DTE 2-1 through DTE 2-2, and DTE 3-1 through 3-2. In addition, the Department incorporates by reference into the record of this proceeding the DOER Report. 220 C.M.R. § 1.10(3).

III. COMPANY 2003 ENERGY-EFFICIENCY PLAN

A. Cost-Effectiveness

Pursuant to the DTE Guidelines: (1) an energy efficiency program shall be deemed cost-effective if its benefits are equal to or greater than its costs, as expressed in present value terms and (2) before implementation, each Program Administrator shall file with the Department sufficient information, including assumptions, to support the determination of cost-effectiveness for all proposed energy efficiency programs. DTE Guidelines at §§ 3.5, 4.2.1.³

NSTAR estimated the pre-implementation benefit/cost (“B/C”) ratio for each energy efficiency program proposed for 2003 (2003 Plan at App. A). The Company provided evidence that it estimated the costs and benefits of its energy efficiency programs in a manner consistent with the DTE Guidelines (Exh. DTE-1-9). With respect to its residential energy efficiency programs, the NSTAR estimated pre-implementation B/C ratios greater than 1.00 for all such programs (2003 Plan at App. A). However, for four of its residential energy efficiency programs, the Energy Star Homes, Residential High Use, Residential Conservation Services/Massachusetts Home Energy Services, and Energy Star Appliances Programs, NSTAR estimated a B/C ratio of 1.12, 1.20, 1.09, and 1.06, respectively, only slightly greater than 1.00 (id. at App. A (A-2)). The Company stated that it is continuously reviewing

³ Each energy efficiency program is subject to a post-implementation evaluation, addressing post-implementation estimates of energy savings, capacity savings, and other savings as well as post-implementation costs. Shareholder incentives are also determined as a result of the post-implementation evaluation. See DTE Guidelines at §§ 4.1, 4.2.2, 5.3.

program, design, and implementation protocols as a means to identify and further enhance cost-effective opportunities (Exhs. DTE-1-3; DTE-1-4).

With respect to its low-income energy efficiency programs, NSTAR estimated an average pre-implementation B/C ratio of 1.46 for its low-income programs (2003 Plan, App. A at A-2). With respect to its commercial and industrial (“C/I”) programs, the Company estimated pre-implementation B/C ratios that range from 2.27 to 6.09 (id.).

B. Competitive Procurement

NSTAR provided a table summarizing its out-sourced and competitive procurement activities (2003 Plan at II, Table 3; Exh. DTE-1-10). NSTAR asserts the following:

(1) approximately 79 percent of its residential program activities are out-sourced and approximately 92 percent of those residential outsourced activities are competitively procured; (2) approximately 89 percent of its low-income program activities are out-sourced and approximately 2 percent of those low-income outsourced activities are competitively procured; and (3) approximately 69 percent of its C/I program activities are out-sourced and approximately 89 percent of those C/I outsourced activities are competitively procured (Exh. DTE-1-10). NSTAR also provided evidence that it coordinated its low-income programs with the Low-Income Energy Affordability Network, and that it implemented these programs through local community action program agencies (2003 Plan at IV-31, IV-34).

C. Analysis and Findings

1. Cost Effectiveness

The record indicates that NSTAR's energy efficiency programs estimate pre-implementation B/C ratios that range from 1.06 to 6.09 (2003 Plan, App. A at A-2). The Department reviewed the method by which the Company determined the benefits and costs for its programs, and finds that the benefits and costs were determined consistent with Department criteria for establishing program cost-effectiveness. DTE Guidelines at §§ 3-4.

The Department notes that the benefits and costs of each program in NSTAR's 2003 Plan are based on projections or forecasts of what benefits and costs may be expected. See DTE Guidelines at § 4.2.1. At this pre-implementation phase, the Department is concerned with energy efficiency programs with expected B/C ratios only nominally above 1.00, such as the Energy Star Homes Program with a B/C ratio of 1.12, Residential High Use Program with a B/C ratio of 1.20, Residential Conservation Services/Massachusetts Home Energy Services Program with a B/C ratio of 1.09, and Energy Star Appliances Program with a B/C ratio of 1.06. The Department has previously noted its concern regarding energy efficiency programs with costs that might be greater than expected benefits. Massachusetts Electric Company and Nantucket Electric Company, DTE 00-65-A, at 5 (2002) (directing MECo to improve cost-effectiveness of Residential Conservation Services program because B/C ratio is less than 1.0). While the programs in the 2003 Plan meet the DTE Guidelines' criteria for cost-effectiveness in the pre-implementation phase, given the low B/C ratio

exhibited by these four above-mentioned programs, it is not a certainty that its cost-effectiveness will be sustained into the post-implementation phase. See DTE Guidelines at §§ 3.5, 4.2.2.⁴ Higher B/C ratios in the pre-implementation phase would greatly increase the likelihood that these programs would operate cost-effectively over time, and that the Department could find that NSTAR's "energy efficiency programs were implemented in a cost-effective manner" when the Department reviews and approves energy efficiency expenditures in the post-implementation phase. G.L. c. 25, § 19; G.L. c. 25A, § 11G; DTE Guidelines at § 4.2.2.

_____2. Competitive Procurement

NSTAR provided evidence that it out-sources and competitively procures a high percentage of all its residential and C/I program activities, and that it complied with G.L. c.25, § 19 for its low-income program activities (Exh. DTE-1-10; 2003 Plan at IV-31, IV-34). Therefore, in accordance with G.L. c. 25, § 19, the Department finds that NSTAR's 2003 Plan provides for competitive procurement to the fullest extent practicable.

IV. COMPANY SHAREHOLDER INCENTIVE PROPOSAL

A. Company Proposal

1. Incentive and Performance Levels

NSTAR proposes an alternative to the method set forth in the DTE Guidelines for calculating the after-tax shareholder incentives that may result from the implementation of

⁴ The Department notes that low B/C ratio programs warrant close monitoring and timely adjustment by the program administrator. See DTE Guidelines at § 4.2.2.

Energy Efficiency Programs (2003 Plan at VI-1, VI-2). See DTE Guidelines at § 5.00. In sum, NSTAR proposes to fix the after-tax shareholder incentive at five percent and adjust the upper and lower levels of performance from which the Company can obtain an incentive (“Proposed Incentive Method”) (2003 Plan at VI-2).

First, the DTE Guidelines provide that the shareholder incentive be calculated as the product of: (1) the average yield of the three-month United States Treasury bill (“T-Bill rate”), and (2) total program implementation costs as included in a distribution company’s Energy Efficiency Plan. DTE Guidelines at § 5.3. For its 2003 Plan, NSTAR proposes to use a fixed rate of five percent instead of the T-Bill rate in this calculation (*id.*). NSTAR states that this modification is necessary because the “very low prevailing Treasury bill rates may not provide an appropriate incentive to the electric distribution companies” (*id.*). The Company provided evidence that T-Bill rates for the years 2000, 2001, and 2002 were 6.00 percent, 3.47 percent, and 1.63 percent, respectively (Exh. DTE 1-12).

Second, pursuant to the DTE Guidelines, a distribution company may earn a shareholder incentive if its energy efficiency program is found to have operated within threshold and exemplary performance levels of 75 percent to 125 percent of design level respectively, as measured during the post-implementation phase.⁵ DTE Guidelines at § 5. In other words, a distribution company that does not achieve at least 75 percent of its design level would receive no shareholder incentive, while a distribution company whose performance

⁵ NSTAR stated that the design level consists of achieving 100 percent of the goals set forth in its 2003 Plan (2003 Plan at VI-2).

level exceeded the 75 percent threshold would receive a shareholder incentive that would vary based on its actual performance level, up to 125 percent of the design level (2003 Plan at VI-1). In its 2003 Plan, NSTAR proposes to establish a threshold performance level of 70 percent and exemplary performance level of 110 percent of design level (id. at VI-2).

NSTAR applied the Proposed Incentive Method to its 1998-2002 energy efficiency plans, noting that it would have earned shareholder incentives ranging from \$1,395,602 to \$5,005,706 under this method (Exh. DTE 1-12c). Using the Proposed Incentive Method in terms of its 2003 Plan, NSTAR projects that it would earn shareholder incentives of about \$3,000,000. (2003 Plan at Section II (Table 2, page 2)).

2. Determinants of Shareholder Incentives

For its 2003 Plan, NSTAR proposes to have three determinants of its shareholder incentive: a savings determinant, value determinant, and performance metric determinant (2003 Plan at VI-2-VI-3, App. D). NSTAR stated that the savings determinant is driven by the ability of its energy efficiency programs to deliver energy savings, demand savings, and non-electric benefits (id. at IV-4). The Company indicated that consistent with its bandwidth proposal, at least 70 percent of the respective design level energy, demand, and non-electric benefits must be achieved before a shareholder incentive may be earned under this determinant (id. at VI-2, App. D, Exh. DTE-3-1).

NSTAR stated that its value determinant is driven by the ability of its energy efficiency programs to produce net benefits (2003 Plan at VI-4). That is, the value determinant rewards the Company for lowering the costs and/or increasing the benefits of its energy efficiency

programs (*id.* at App. D). NSTAR stated that its programs must produce at least 70 percent of the design level net benefits before an incentive may be earned under this determinant (*id.* at VI-2, App. D; Exh. DTE-3-1). NSTAR provided evidence that its savings, value, and performance metric determinants account for approximately 44, 18, and 38 percent, respectively, of its 2003 shareholder incentive (*id.*).

B. DOER Report

DOER recommends approval of NSTAR's Proposed Incentive Method (DOER Report at 4). DOER states that the Proposed Incentive Method is the product of extensive discussions with distribution companies, stakeholders, and DOER (*id.*). DOER notes that the Proposed Incentive Method has been developed for use by all Massachusetts distribution companies, and that, if adopted on that basis, would provide uniformity in terms of the shareholder incentive method (*id.* at 3-4). DOER asserts that the Proposed Incentive Method is designed to more directly align the energy efficiency goals of distribution companies with energy efficiency goals of ratepayers (*id.* at 6-7).

With regard to the proposed five percent element in the calculation of its after-tax shareholder incentive, DOER contends that recent T-Bill rates have been much too low to adequately motivate distribution companies to provide high quality energy efficiency programs (*id.* at 3-4). For example, DOER states that from April to December of 2001, the T-Bill rate fell from 3.97 percent to 1.72 percent (*id.* at 4). By December 2002, the T-Bill rate had fallen to 1.21 percent (*id.*). DOER concludes that the downward trajectory and variability of the

recent T-Bill rates have been detrimental to distribution company efforts to design and deliver energy efficiency programs (id. at 5-6).

With regard to NSTAR's proposal to adjust the upper and lower levels of performance from which the Company can obtain an incentive, DOER argues that the "wide" 75 to 125 percent bandwidth in the DTE Guidelines is no longer appropriate because, with experience gained over recent years, energy efficiency program performance can now be more accurately predicted (id. at 6). DOER contends that 70 percent is appropriate as a bandwidth minimum because this level will allow NSTAR to better absorb the risks associated with this Proposed Incentive Method (id.). DOER asserts that capping the upper bound at 110 percent instead of 125 percent is appropriate because the lower cap will conserve energy efficiency funds without impairment to distribution company motivation because the new cap is part of a larger arrangement that includes the five percent rate (id.). DOER estimates that a 110 percent cap could reduce exposure to ratepayers for after-tax incentive payments to Distribution Companies by nearly 1.25 percent, and this savings could instead be spent on energy efficiency activities (id.).

C. Analysis and Findings

1. Incentive and Performance Levels

When an entity seeking Department approval of its Plan requests a different method from that specified in the DTE Guidelines, the burden falls on that entity to demonstrate the compelling nature of such a request. DTE Guidelines at § 1(2). In this proceeding, NSTAR has proposed (1) a fixed shareholder incentive rate of five percent, instead of the T-Bill rate in

calculating its shareholder incentive and (2) a threshold performance level of 70 percent and exemplary performance level of 110 percent of design level for use in its calculation of shareholder incentives.

The Department previously granted an exception to the DTE Guidelines that allowed distribution companies to use a fixed rate of 4.25 percent instead of the T-Bill rate for 2002 as an element in calculating its shareholder incentives. NStar Electric Company, D.T.E. 00-63-A at 8 (2003); Western Massachusetts Electric Company, D.T.E. 00-79-A at 7 (2003); Massachusetts Electric Company and Nantucket Electric Company, D.T.E. 00-65-A at 7 (2002). Most recently, the Department granted an exception to the DTE Guidelines that allowed a distribution company to use a fixed rate of five percent instead of the T-Bill rate in calculating after-tax shareholder incentives for calendar year 2003. Massachusetts Electric Company and Nantucket Electric Company, D.T.E. 03-2, at 17 (2003). The Department has recognized that the size of an incentive must balance promoting good program management with benefitting ratepayers by directing most of the budget to program implementation. D.T.E. 98-100, at 37. DOER, the agency charged by the Legislature with much of the oversight of energy efficiency programs, has agreed that offering an incentive is needed to motivate companies to manage their energy efficiency programs well. Id. at 35. DOER maintained that an incentive of four to six percent, equal to a three to four percent riskless real rate of return plus an inflation rate of one to two percent, would be sufficient to motivate electric companies to manage energy efficiency programs well. Id. at 36. DOER stated that the then-recent T-Bill rate fell in the required four to six percent range. Id.

The Company has provided evidence that the T-Bill rate is now lower than the rate recommended by DOER in D.T.E. 98-100. While NSTAR's proposed five percent after-tax rate exceeds the rate now provided for in the DTE Guidelines, and the method approved in D.T.E. 00-65-A, it is near the middle of the range that DOER proposed in D.T.E. 98-100, and the same as the five percent after-tax rate most recently approved by the Department in Massachusetts Electric Company and Nantucket Electric Company, D.T.E. 03-2.

In determining incentive levels, the Department must reach a balance between two objectives: (1) promoting effective programs, and (2) protecting the interest of ratepayers. D.T.E. 98-100, at 37-38 (1999); D.T.E. 98-100, at 21-22 (2000). The Company's proposal balances these two objectives, and is consistent with DOER information that the Department used in formulating the DTE Guidelines. The Department finds that the Company has met its burden to demonstrate the need for its request for an alternate method to calculate shareholder incentives in 2003. DTE Guidelines at § 1(2). Accordingly, the Department grants the Company's request for an exception to the DTE Guidelines, and grants NSTAR's request to use five percent instead of the T-Bill rate in calculating after-tax shareholder incentives for the 2003 Plan for calendar year 2003.

The record indicates that NSTAR's proposal to establish a threshold performance level of 70 percent and exemplary performance level of 110 percent of design level is the product of extensive discussions between distribution companies, stakeholders, and DOER. DOER has concluded that implementation of this tighter bandwidth is justified because, with experience gained in recent years, the performance of energy efficiency programs can now be charted

more accurately. DOER also estimated that lowering the threshold level might result in more funds to be spent on energy efficiency activities, instead of on after-tax shareholder incentives. The Department agrees with DOER's conclusions. See DTE Guidelines at § 6.2(5). Most recently, the Department approved a similar proposal by a distribution company for use of a threshold performance level of 70 percent, and exemplary performance level of 110 percent of design level for use in its calculation of shareholder incentives. Massachusetts Electric Company and Nantucket Electric Company, D.T.E. 03-2, at 18. In light of DOER's conclusions, and the collaborative nature of the proposal, the Department finds that the Company has demonstrated the reasonableness of its proposal. Accordingly, the Department accepts the Company's proposal to establish a threshold performance level of 70 percent and exemplary performance level of 110 percent of design level.

2. Determinants of Shareholder Incentives

The Department notes that the savings and value determinants proposed by NSTAR represent a shift in scope and emphasis when compared to the existing shareholder incentive arrangement. Distribution companies may express the level of performance they expect to achieve in implementation of their energy efficiency programs in levels of savings, in energy commodity and capacity, and in other measures of performance as appropriate. DTE Guidelines at § 5.2. Here the Company has established "other measures of performance."

Under the Company's proposed method, the savings and value determinants will account for 62 percent of shareholder incentive monies while performance metrics will account for the remaining 38 percent. The Department notes that the savings and value determinants

promise to reward energy efficiency accomplishments and cost reduction, and recognizes the importance of a mechanism that makes this relationship visible. In addition, the Department recognizes the importance of cost reduction as a means of rewarding superior management and promoting effective use of energy efficiency funds. Accordingly, the Department finds that the Company's savings and value determinants are appropriate.

V. ORDER

Accordingly, after due notice, opportunity for public comment, and consideration, it is hereby

ORDERED: That the Petition of NSTAR Electric Company for approval of its Energy Efficiency Plan for 2003 is APPROVED; and it is

FURTHER ORDERED: That NSTAR Electric Company follow all other directives contained in this Order.

By Order of the Department,

Paul G. Afonso, Chairman

James Connelly, Commissioner

W. Robert Keating, Commissioner

Eugene J. Sullivan, Jr., Commissioner

Deirdre K. Manning, Commissioner

TABLE 1. NSTAR Energy Efficiency Budget (\$000) and Benefit/Cost Ratios

	2003	
	Budget	B/C Ratio
Non-Low Income Residential		
Energy Star Homes	2,494	1.12
Residential High Use	2,133	1.20
Residential Conservation Services/Massachusetts Home Energy	1,783	1.09
Energy Star Lighting	3,137	1.83
Energy Star Appliances	6,341	1.06
Other *	805	NA
Subtotal Residential	16,693	
Low-Income		
New Construction	929	1.40
Retrofit - Single Family	1,986	1.40
Retrofit - Multi-Family	1,518	1.67
Other *	85	NA
Subtotal Low Income	4,518	
Commercial / Industrial		
Construction Solutions	11,366	6.09
Business Solutions	19,767	2.27
Small Business Solutions	11,912	2.30
Other *	949	NA
Subtotal Commercial/Industrial	43,994	
TOTAL BUDGET	65,205	

Source: 2003 Plan at App. A (A-2)

B/C ratios include participant costs.

* The expenses of all these “Other” programs are allocated to other programs within their respective customer class.

Appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part.

Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. (Sec. 5, Chapter 25, G.L. Ter. Ed., as most recently amended by Chapter 485 of the Acts of 1971).